

### ***Amendments to the Specification***

Please substitute Figure 1 with formal drawing **FIG. 1**.

Please substitute the paragraph beginning on page 4, paragraph [0017], with the following paragraph [0017]:

**FIG. 1.** A process flow chart for one embodiment of the invention. Cell Lysis: The cells are resuspended in buffer using a static mixer and a closed vessel. Cell lysis is completed by a modification of the alkaline lysis method followed by neutralization. Gentle mixing is completed using a static mixer in continuous re-circulation mode. Lysate Clarification: Removal of cell debris and lysate clarification is accomplished by diatomite aided depth filtration. Ultrafiltration/Diafiltration: After clarification, the lysate is concentrated 10-15 fold using hollow fiber ultrafiltration followed by a buffer exchange. PEG precipitation: The concentrated nucleic acid is selectively precipitated using polyethylene glycol (PEG) for further enrichment and concentration. Ammonium acetate precipitation: The PEG pellet is collected by centrifugation and dissolved in buffer. Ammonium acetate is added to the solution to selectively precipitate contaminants which are removed by centrifugation. The supernatant is IPA precipitated and stored at -20°C until chromatography step. The storage at -20°C is a STOP POINT in the process. Q anion HyperD exchange chromatography: The IPA precipitated nucleic acid is pelleted by centrifugation. The pellet is dissolved in column buffer A, 0.22 um filtered and loaded onto the column. After loading there are intermediate step washes before product elution. Octyl hydrophobic interaction chromatography: The HyperD elution peak is diluted 1:1 with 3M ammonium sulfate, 0.22 um filtered then loaded onto the hydrophobic interaction chromatography (HIC) column. Under the load conditions product flows through in the void volume; residual contaminants bind to the column. Ultrafiltration/Diafiltration: The purified pDNA is concentrated followed by a

buffer exchange to remove the ammonium acetate. Ethanol precipitation: The purified DNA is ethanol precipitated and stored at -20° C until bulking.